

A dynamic, high-speed photograph of water splashing, creating a sense of movement and freshness. The water is captured in mid-air, with droplets and bubbles visible, set against a light blue background.

FTON

Drinking Water
**Quality
Report**



CITY OF COLLEGE STATION

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2014 Drinking Water Quality Report

For the period of January 1, 2011 to December 31, 2014 • City of College Station, Public Water System ID TX0210002

This report provides a summary of important information about your drinking water and the efforts by City of College Station Water Services to provide safe drinking water. Water quality test results shown are required by the Texas Commission on Environmental Quality (TCEQ). Annual Drinking Water Quality Reports such as this one are required of every public water system to provide information to their water customers as stated in the 1996 Safe Drinking Water Act Amendments. We are proud to report that, once again, the City of College Station provided its customers with safe, high quality drinking water that meets all federal and state requirements.

Special Notice for Elderly, Infants, and Immuno-Compromised People:

You may be more vulnerable than the general population to certain microbial contaminants, such as cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; people who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by cryptosporidium are available from the **Safe Drinking Water Hotline (800-426-4791)**.

Information about Drinking Water Contaminants:

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) **Safe Drinking Water Hotline at (800-426-4791)**.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants found in drinking water may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact College Station Water Services at **979-764-3660**.

FLUID FACT:

If you have an automatic irrigation system for your landscape and you're concerned with reducing water use, call **979-764-3660** or visit cstx.gov/water to sign up for a **FREE** landscape irrigation checkup.

For more information regarding this report contact: Jennifer Nations
Water Resource Coordinator 979-764-6223 | jnations@cstx.gov

Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al telefono (979) 764-3433.

Information about Drinking Water Sources and Source Water Assessments

College Station relies entirely on groundwater for its drinking water supply, pumping water from eight deep wells in the Carrizo-Wilcox Aquifer and one well in the Sparta Aquifer. The Texas Commission on Environmental Quality (TCEQ)'s assessment of your source water, that describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. Results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Jennifer Nations at jnations@cstx.gov.

Further details about sources and source-water assessments are available online at Drinking Water Watch at tceq.texas.gov/DWW.

Regional Cooperation Efforts

The City of College Station and Wellborn Special Utility District (SUD) have entered into an innovative regional cooperation effort in which Wellborn SUD transmits water from its well field in Northern Brazos County to its customers in south College Station using the City of College Station's raw water transmission lines. The well fields for both water systems are in the Carrizo-Wilcox Aquifer. Wellborn puts water from its well field into College Station's transmission line at College Station's well field pump station, and takes out water to serve its customers through existing interconnects with College Station. In 2014, this transfer occurred from May to October. *For more information about Wellborn SUD's water quality please contact General Manager, Stephen Cast at 979-690-9799.*

Water Loss Audit Results:

The Texas Legislature requires all retail public water suppliers to file a water loss report annually and notify their customers of the results. Water loss is water that is produced by the utility for which the utility does not receive revenue. A variety of factors contribute to water loss, including meter accuracy, water line breaks and leaks, and unauthorized consumption.

In the most recent water loss audit submitted to the Texas Water Development Board for the 2014 calendar year, the City of College Station recorded an estimated 411,834,237 gallons of water loss. *For questions about the water loss audit, please call 979-764-6223.*

PUBLIC PARTICIPATION OPPORTUNITIES

City Council Meetings

Date: 2nd and 4th Thursday

Time: 7 p.m.

**Location: College Station City Hall
979-764-3510**

To learn about future public meetings concerning your drinking water, or to schedule one, please call the City Secretary's Office at **979-764-3510**, or College Station Water Services at **979-764-3660**.



2014 Water Quality Test Results

Definitions

The following tables contain scientific terms and measures, some of which may require explanation.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Average or Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs

allow for a margin of safety.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

na: not applicable.

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Water Quality Test Results

Disinfectants and Disinfection By-Products

Year Sampled	Contaminant	Highest Average Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Possible Source(s) of Contaminant
2014	Chlorine	2.33	0.61 - 2.33	2	4	ppm	N	Added to drinking water for disinfection
2014	Haloacetic Acids (HAA5)*	2.63	1.4 - 3.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
2014	Total Trihalomethanes (TTHM)	34.4	15.8 - 52.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.



Coliform Bacteria

Year Sampled	Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Possible Source(s) of Contaminant
2014	0	5% of monthly samples are positive.	1.92%	1 positive sample	0	N	Naturally present in the environment.

Total coliform bacteria are not disease-causing organisms but are often found in association with other microbes that are capable of causing disease. They are used as indicators of microbial contamination of drinking water because their absence from water is a good indication that the water is microbiologically safe for human consumption. In 2014, a total of 1,226 samples, at least 101 per month, were collected by Environmental Services personnel and analyzed by the Brazos County Health Department. Of these 1,226 samples, a total of four tested positive for total coliform bacteria. All repeat samples were negative, and College Station continued its record of 100 percent compliance with the Total Coliform Rule.

Inorganic Contaminants

Year Sampled	Substance	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation? Y/N	Possible Source(s) of Contaminant
2014	Fluoride	0.48	0.44 - 0.44	4	2	ppm	N	Erosion of natural deposits; discharge from fertilizer and aluminum factories
2012	Barium	0.0807	0.0807 - 0.0807	2	2	ppm	N	Discharge of drilling wastes or metal refineries; erosion of natural deposits
2014	Nitrate	0.06	0.06 - 0.06	10	10	ppm	N	Runoff from fertilizer; leaching from septic tanks; erosion of natural deposits

Radioactive Contaminants

Year Sampled	Substance	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation? Y/N	Possible Source(s) of Contaminant
2011	Beta/photon emitters*	5.1	5.1 - 5.1	50	0	pCi/L	N	Decay of natural and man-made deposits
2011	Combined Radium 226/228	2.3	2.3 - 2.3	5	0	pCi/L	N	Erosion of natural deposits
2011	Gross alpha excluding radon and uranium	2.3	2.3 - 2.3	15	0	pCi/L	N	Erosion of natural deposits

*EPA considers 50 pCi/L to be the level of concern for beta particles.



Unregulated Contaminant Monitoring

Year Sampled	Substance	Average Level Detected	Range of Levels Detected	Units
2014	Chlorate	171.75	170 - 173	ppb
2014	Strontium	264.75	262 - 303	ppb
2014	Hexavalent Chromium	0.12	0.11 – 0.13	ppb
Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.				

Under the Unregulated Contaminant Monitoring Rule (UCMR), every five years the United States Environmental Protection Agency conducts testing for up to 30 unregulated potential drinking water contaminants. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. The EPA is conducting the third round of UCMR monitoring. This round of testing includes monitoring for hormones, Volatile Organic Compounds (VOC's), Perfluorinated Compounds, Synthetic Organic Compounds (SOC's), metals, and viruses. A complete list of substances being tested for and a description of the monitoring parameters can be found at the American Water Works Association's "Drink Tap.Org" website at drinktap.org/home/water-information/water-quality/ucmr3.aspx.

Lead and Copper Monitoring

Year Sampled	Substance	90th Percentile*	Action Level	Sites Exceeding Action Level	Possible Source(s) of Contaminant
2012	Lead	2.160 ppb	15 ppb	1	Corrosion of household plumbing systems; erosion of natural deposits
2012	Copper	0.121 ppm	1.3 ppm	0	Corrosion of household plumbing systems; erosion of natural deposits

Lead and copper are monitored at the customer's water tap because exposure comes from household plumbing. College Station's water does not exceed the action level for lead or copper. 90 percent of College Station tap water samples measured at or below 1.8 parts per billion (ppb) for lead and 0.16 parts per million (ppm) for copper. The Environmental Protection Agency considers the 90th percentile the same as an 'average' value for other contaminants.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at epa.gov/safewater/lead.

Secondary and Other Non-Regulated Contaminants

Many constituents such as calcium, sodium, or iron that are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary contaminants and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern but may greatly affect the appearance and taste of your water.

Year Sampled	Substance	Average Level Detected	Range of Levels Detected	Units
2014	Alkalinity (Bicarbonate)	442	mg/L	No recommendation
2014	Alkalinity (Total)	390	mg/L	No recommendation
2011	Calcium	2.82	mg/L	No recommendation
2014	Carbonate	17	mg/L	No recommendation
2014	Chloride	57	mg/L	300
2011	Copper	0.0063	mg/L	1
2014	Diluted Conductance	966	µmhos/cm	No recommendation
2014	Fluoride	0.48	mg/L	2
2011	Manganese	0.0066	mg/L	0.05
2014	pH	8.4	N/A	>7.0
2014	Phenolphthalein Alkalinity (as CaCO ₃)	14	mg/L	No recommendation
2011	Sodium	193	mg/L	No recommendation
2014	Sulfate	8	mg/L	300
2014	Total Dissolved Solids	544	mg/L	1,000
2011	Total Hardness (as CaCO ₃)	7.04	mg/L	No recommendation

Just How Reliable Is Your Drinking Water?

An August 2014 Rasmussen Reports national telephone survey found that 90 percent of Americans consider their water supply somewhat dependable and 64% say it is very dependable. Only 7percent believe their local water supply is not very or not at all dependable. (Source: rasmussenreports.com/public_content/lifestyle/general_lifestyle/august_2014/do_americans_think_their_water_supply_is_safe.) You can be confident in the safety and reliability of College Station's drinking water, which is rated **SUPERIOR** by the TCEQ and meets all State and Federal standards.

How Much is a Drop? Understanding Concentration Levels

Many MCLs are set in units of parts per million or parts per billion. Some drinking water contaminants can be detected in amounts as small as parts per quadrillion! How much is that, anyway?

Some real-world parts-per-million and parts-per-billion equivalents:	\$0.01 in \$10,000 = 1 ppm	\$0.01 in \$10,000,000 = 1 ppb
	1 minute in 2 years = 1 ppm	1 second in 32 years = 1 ppb
	1 inch in 16 miles = 1 ppm	1 inch in 16,000 miles = 1 ppb

One part per billion is 1,000 times smaller than one part per million – the difference between \$1 and \$1,000.



What is College Station's Water Tested For? When, and Why?

This report contains the results of drinking water quality monitoring conducted from January 1, 2011 – December 31, 2014. Why such a long period? College Station's drinking water comes from groundwater sources, and the amounts of some contaminants does not change often, so these are sampled for less frequently. Other substances - for example chlorine that is added for drinking water disinfection - change daily so they are tested for more frequently.

What are we looking for?	How often?	When?	Why do we look for it?	Who collects?	Who tests?
Disinfectant Residual (Chlorine)	Daily	2014	Ground Water Rule	City of College Station	City of College Station
Coliform Bacteria	Monthly	2014	Total Coliform Rule	City of College Station	Brazos Co. Health Dept.
Disinfection By-Products (DBP's)	Quarterly	2014	Disinfection By-Product Rule	TCEQ	TCEQ
Nitrates	Annually	2014	Primary Drinking Water Standard	TCEQ	TCEQ
Unregulated Contaminants	Every 2 years	2014	Unregulated Contaminant Monitoring Rule (UCMR)	TCEQ	TCEQ
Synthetic Organic Compounds (SOC's)	Every 3 years	2015	Primary Drinking Water Standard	TCEQ	TCEQ
Minerals	Every 3 years	2014	Primary Drinking Water Standard	TCEQ	TCEQ
Lead & Copper	Every 3 years	2015	Lead & Copper Rule	City of College Station	Texas Dept. of State Health Svcs.
Metals	Every 6 Years	2017	Primary Drinking Water Standard	TCEQ	TCEQ
Radionuclides	Every 6 Years	2017	Primary Drinking Water Standard	TCEQ	TCEQ
Volatile Organic Compounds (VOC's)	Every 6 Years	2017	Primary Drinking Water Standard	TCEQ	TCEQ



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